

In the Claims

1. (Currently Amended) A method for managing real-time bandwidth requests in a wireless network, comprising:

receiving a bandwidth request for a connection for bandwidth of to a cell of a wireless network, the received request comprising a call admission request, an additional bandwidth request, or a handoff request, the received request including subscription level information;

determining a priority associated with the connection based on the subscription level information; and

processing the received request for the connection based on the priority.

2. (Original) The method of Claim 1, wherein the priority comprises a subscription level.

3. (Original) The method of Claim 1, wherein the subscription level comprises a quality of service (QoS) and processing the request based on the QoS comprises processing the request in an order based on the QoS.

4. (Original) The method of Claim 3, processing the request in the order based on the QoS comprising:

retrieving a QoS policy for the connection;

determining a class of service (CoS) for the connection based on the QoS policy;

queuing the request in a corresponding CoS queue; and

processing the request after requests in higher priority CoS queues have been processed.

5. (Original) The method of Claim 4, further comprising clearing the request after a delay threshold for the request is reached.

6. (Currently Amended) The method of Claim 1, wherein the subscription level comprises a class of service (CoS), further comprising:

receiving a plurality of admission requests each for ~~admission~~ of a connection to the cell of the wireless network, each request selected from the group consisting of a call admission request, an additional bandwidth request, and a handoff request, each received request including subscription level information;

queuing each of the requests in one of a plurality of queues corresponding to the CoS for the connection based on the subscription level information;

clearing from the queues any request reaching a delay threshold; and

ai processing requests in the queues by queue beginning with a queue corresponding to a highest priority CoS and in a descending order of CoS priority to provide bandwidth to corresponding connections until available bandwidth is exhausted.

7. (Currently Amended) The method of Claim 1, wherein ~~the~~ at least one of the plurality of requests ~~request~~ is a call origination request.

8. (Currently Amended) The method of Claim 1, wherein ~~the~~ at least one of the plurality of requests ~~request~~ is a handoff request.

9. (Currently Amended) The method of Claim 1, wherein the connection is an existing connection and ~~the~~ at least one of the plurality of requests ~~request~~ is an additional bandwidth request for the connection.

10. (Currently Amended) The method of Claim 1, further comprising processing ~~the~~ each request by determining whether allowing each request would exceed a blocking threshold for the cell.

11. (Currently Amended) The method of Claim 10, wherein the cell comprises a plurality of blocking thresholds and further comprising processing ~~the~~ each request by determining whether allowing ~~the~~ each request would exceed a corresponding blocking threshold.

a1 12. (Original) The method of Claim 11, wherein the cell comprises a call bandwidth blocking threshold for call admission and additional bandwidth requests and a handoff blocking threshold for call handoff requests.

13. (Currently Amended) A system for managing real-time bandwidth request in a wireless network, comprising:

means for receiving a bandwidth request for ~~admission of a connection for bandwidth~~ of to a cell of a wireless network, the received request comprising a call admission request, an additional bandwidth request, or a handoff request, the received request including subscription level information;

means for determining a priority associated with the connection based on the subscription level information; and

a) means for processing the request for the connection based on the priority.

14. (Original) The system of Claim 13, wherein the priority comprises a subscription level.

15. (Original) The system of Claim 13, wherein the subscription level comprises a quality of service (QoS) and the means for processing the request based on the QoS comprises means for processing the request in an order based on the QoS.

16. (Original) The system of Claim 15, the means for processing the request in the order based on the QoS comprising:

means for retrieving a QoS policy for the connection;

means for determining a class of service (CoS) for the connection based on the QoS policy;

means for queuing the request in a corresponding CoS queue; and

means for processing the request after requests in higher priority CoS queues have been processed.

17. (Original) The system of Claim 16, further comprising means for clearing the request after a delay threshold for the request is reached.

18. (Currently Amended) The system of Claim 1, wherein the subscription level comprises a class of service (CoS), the system further comprising:

means for receiving a plurality of requests each for admission of a connection to the cell of the wireless network, each request comprising a call admission request, an additional bandwidth request, or a handoff request, each received request including subscription level information;

means for queuing each of the requests in one of a plurality of queues corresponding to the CoS for the connection based on the subscription level information;

means for clearing from the queues any request reaching a delay threshold; and

AI means for processing requests in the queues by queue beginning with a queue corresponding to a highest priority CoS and in a descending order of CoS priority to provide bandwidth to corresponding connections until available bandwidth is exhausted.

19. (Currently Amended) The system of Claim 13, wherein ~~the~~ at least one of the plurality of requests ~~request~~ is a call origination request.

20. (Currently Amended) The system of Claim 13, wherein ~~the~~ at least one of the plurality of requests ~~request~~ is a handoff request.

21. (Currently Amended) The system of Claim 13, wherein the connection is an existing connection and ~~the~~ at least one of the plurality of requests ~~request~~ is an additional bandwidth request for the connection.

22. (Currently Amended) The system of Claim 13, further comprising processing ~~the~~ each request by determining whether allowing ~~the~~ each request would exceed a blocking threshold for the cell.

23. (Currently Amended) The system of Claim 22, wherein the cell comprises a plurality of blocking thresholds and further comprising processing ~~the~~ each request by determining whether allowing ~~the~~ each request would exceed a corresponding blocking threshold.

a 24. (Original) The system of Claim 23, wherein the cell comprises a call bandwidth blocking threshold for call admission and additional bandwidth requests and a handoff blocking threshold for call handoff requests.

25. (Currently Amended) A system for managing real-time bandwidth request in a wireless network, comprising:

logic encoded in media; and

the logic operable to:

receive a bandwidth request for a connection ~~for bandwidth of~~ to a cell of a wireless network, the received request comprising a call admission request, an additional bandwidth request, or a handoff request, the received request including subscription level information;

determine a priority associated with the connection based on the subscription level information; and

process the received request for the connection based on the priority.

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26. (Original) The system of Claim 25, wherein the priority comprises a subscription level.

27. (Currently Amended) The system of Claim 25, wherein the subscription level comprises a quality of service (QoS), the logic operable to process the received request based on the QoS by processing the received request in an order based on the QoS.

28. (Currently Amended) The system of Claim 27, the logic operable to process the received request in the order based on the QoS by retrieving a QoS policy for the connection, determining a class of service (CoS) for the connection based on the QoS policy, queuing the received request in a corresponding CoS queue and processing the received request after requests in higher priority CoS queues have been processed.

29. (Currently Amended) The system of Claim 28, the logic further operable to clear the received request after a delay threshold for the request is reached.

30. (Original) The system of Claim 25, wherein the subscription level comprises a class of service (CoS), the logic further operable to receive a plurality of requests each for admission of a connection to the cell of the wireless network, queue each of the requests in one of a plurality of queues corresponding to the CoS for the connection, clear from the queues any request reaching a delay threshold and process requests in the queues by queue beginning with a queue corresponding to a highest priority CoS and in a descending order of CoS priority to provide bandwidth to corresponding connections until available bandwidth is exhausted.

al 31. (Currently Amended) The system of Claim 25, wherein the received request is a call origination request.

32. (Currently Amended) The system of Claim 25, wherein the received request is a handoff request.

33. (Original) The system of Claim 25, wherein the connection is an existing connection and the request is an additional bandwidth request for the connection.

34. (Currently Amended) The system of Claim 25, the logic further operable to process the received request by determining whether allowing the received request would exceed a blocking threshold for the cell.

35. (Currently Amended) The system of Claim 34, wherein the cell comprises a plurality of blocking thresholds and the logic is further operable to process the received request by determining whether allowing the request would exceed a corresponding blocking threshold.

36. (Original) The system of Claim 35, wherein the cell comprises a call bandwidth blocking threshold for call admission and additional bandwidth requests and a handoff blocking threshold for call handoff requests.

37. (Allowed) A method for admission control in a wireless network, comprising:
receiving a call admission request for admission of a first connection to a cell of a wireless network;

retrieving a quality of service (QoS) policy for the first connection;

determining a class of service (CoS) for the first connection based on the QoS policy;

queuing the call admission request in a call queue corresponding to the CoS of the first connection;

clearing the call admission request if a delayed threshold for the call admission request is reached;

a1 admitting the first connection if a transmit power of the cell is less than a call bandwidth blocking threshold after call admission requests in queues corresponding to a higher priority CoS have been processed and after previously received call admission request in a same queue have been processed;

receiving a handoff request for admission of a second connection to the cell of the wireless network;

retrieving a QoS policy for the second connection;

determining a CoS for the second connection based on the QoS policy;

queuing the handoff request in a handoff queue corresponding to the CoS of the second connection;

clearing the handoff request if a delay threshold for the handoff request is reached;
and

admitting the second connection if a transmit power of the cell is less than a handoff blocking threshold after handoff requests in queues corresponding to a higher priority CoS have been processed and after previously received handoff requests in a same queue have been processed.

38. (Allowed) The method of Claim 37, wherein the CoS comprises one of a premium CoS, assured CoS and a best effort CoS.

39. (Allowed) An admission controller for a wireless network node, comprising:
a call bandwidth control including a plurality of disparate class of service (CoS) queues and operable to queue each call admission and additional bandwidth request in a corresponding one of the CoS queues and to process call admission and additional bandwidth requests from the CoS queues by queue in order of CoS priority of the queues; and

a handoff admission control comprising a plurality of disparate CoS queues and operable to queue each handoff request in a corresponding one of the CoS queues and to process handoff requests from the CoS queues by queue in order of a CoS priority of the queues.
